

In the claims

14. (Three times amended) ~~A~~ The method of claim 33 for growing eukaryotic cells comprising

bringing into contact the cells and a composition comprising

~~a biocompatible solid substrate,~~

~~biocompatible polymeric tethers, and~~

~~growth effector molecules;~~

~~wherein one end of each tether is covalently linked to the substrate and each growth effector molecule is covalently linked to a distal end of a tether so that the growth effector molecule cannot be internalized by cells attached to the substrate, and the growth effector molecules are attached to the substrate in a concentration effective to enhance the rate of target cell growth without internalization of the molecules; and~~

~~wherein the one end of each tether covalently linked to the substrate is achieved using an attachment agent is selected from the group consisting of cyanogen bromide, succinimide, aldehyde, tosyl chloride, avidin-biotin, epoxide, and maleimide, and carbodiimide, and~~

~~maintaining the contacting cells and composition under conditions and for a time sufficient to cause the cells to grow;~~

~~wherein the step of bringing into contact comprises administering the composition to a patient in need of cell growth.~~

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AMENDMENT AND RESPONSE TO OFFICE ACTION

32. (Three times amended) A The method of claim 34 testing a compound for an effect on tissue comprising

bringing into contact the compound to be tested and a composition comprising

a biocompatible solid substrate,

biocompatible polymeric tethers,

growth effector molecules, and

growing cells,

wherein one end of each tether is covalently linked to the substrate and each growth effector molecule is covalently linked to a distal end of a tether so that the growth effector molecule cannot be internalized by cells attached to the substrate, the growth effector molecules are attached to the substrate in a concentration effective to enhance the rate of target cell growth without internalization of the molecules, and the end of each tether covalently linked to the substrate is achieved using an wherein the attachment agent is selected from the group consisting of cyanogen bromide, succinimide, aldehyde, tosyl chloride, avidin-biotin, epoxide, and maleimide, and carbodiimide; and wherein the growing cells are bound to the growth effector molecules;

incubating the compound and the composition under conditions promoting cell growth,
and

observing the cells for any effect not observed in cells not brought into contact with the composition.

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AMENDMENT AND RESPONSE TO OFFICE ACTION

Please add new claims 33 and 34 as follows:

33. (new) A method for growing eukaryotic cells comprising

bringing into contact the cells with a composition comprising

a biocompatible solid substrate,

biocompatible polymeric tethers, and

growth effector molecules,

wherein one end of each tether is covalently linked to the substrate and one end is covalently linked to an growth effector molecule that the growth effector molecule cannot be internalized by cells attached to the substrate;

wherein the growth effector molecules are attached to the substrate in a concentration effective to enhance the rate of target cell growth without internalization of the molecules; and

wherein the tether is covalently linked to the substrate and to the growth effector molecule by the same attachment agents, maintaining the cells in contact with the composition under conditions and for a time sufficient to cause the cells to grow.

34. (new) A method of testing a compound for an effect on tissue comprising

bringing into contact the compound to be tested and a composition comprising

a biocompatible solid substrate,

biocompatible polymeric tethers,

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growth effector molecules, and

growing cells,

wherein one end of each tether is covalently linked to the substrate and one end is covalently linked to an growth effector molecule that the growth effector molecule cannot be internalized by cells attached to the substrate;

wherein the growth effector molecules are attached to the substrate in a concentration effective to enhance the rate of target cell growth without internalization of the molecules;

wherein the tether is covalently linked to the substrate and to the growth effector molecule by the same attachment agents; and

wherein the growing cells are bound to the growth effector molecules; incubating the compound and the composition under conditions promoting cell growth; and

observing the cells for any effect not observed in cells not brought into contact with the composition.